

## WHAT WE CLAIM IS:

1. An electrophotosensitive material comprising a conductive substrate and a photosensitive layer containing an electric charge generating material, an electric charge  
5 transferring material, an insoluble azo pigment and a binder resin provided on the conductive substrate, wherein the electric charge generating material is phthalocyanine and the insoluble azo pigment has no OH group in the molecule, and an absorbance of the insoluble azo pigment in an absorption wavelength range of the electric charge  
10 generating material is  $1/3$  or less of an absorbance in the wavelength of the electric charge generating material.

2. An electrophotosensitive material comprising a conductive substrate and a photosensitive layer containing an electric charge generating material, an electric charge  
15 transferring material, an insoluble azo pigment and a binder resin provided on the conductive substrate, wherein the electric charge generating material is phthalocyanine and the insoluble azo pigment has no OH group in the molecule, and an absorbance of the insoluble azo pigment in a wavelength range of an exposure light source of  
20 an image forming apparatus is  $1/3$  or less of an absorbance in the wavelength of the electric charge generating material.

3. The electrophotosensitive material according to claim 1 or 2, wherein the binder resin is at least one resin selected from the group consisting of polycarbonate, polyester,  
25 polyallylate, polystyrene and polymethacrylate ester.

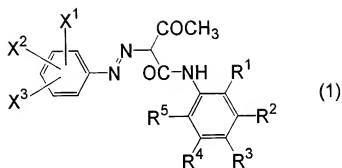
4. The electrophotosensitive material according to any one of claims 1 to 3, wherein the phthalocyanine is  $\alpha$  type titanyl phthalocyanine having each main diffraction peak at a Bragg angle ( $2\theta \pm 0.2^\circ$ ) =  $7.6^\circ$  and  $28.6^\circ$  in an X-ray diffraction spectrum, 5 or Y type titanyl phthalocyanine having a main diffraction peak at a Bragg angle ( $2\theta \pm 0.2^\circ$ ) =  $27.2^\circ$ .

5. The electrophotosensitive material according to any one of claims 1 to 4, wherein the phthalocyanine is titanyl phthalocyanine and does not have an endothermic peak except for 10 a peak associated with evaporation of adsorbed water in differential scanning calorimetry during heating from  $50^\circ\text{C}$  to  $400^\circ\text{C}$ .

6. The electrophotosensitive material according to any one of claims 1 to 5, wherein the photosensitive layer is obtained 15 by forming a film using a coating solution containing the electric charge generating material, the electric charge transferring material, the insoluble azo pigment and the binder resin to form a film, and

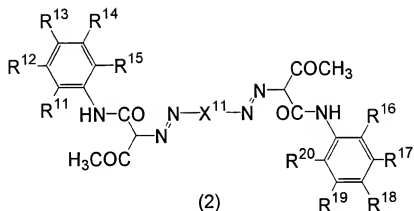
a dispersion medium of the coating solution is at least one 20 organic solvent selected from the group consisting of tetrahydrofuran, dioxane, dioxolane, cyclohexanone, toluene, xylene, dichloromethane, dichloroethane and chlorobenzene.

7. The electrophotosensitive material according to any one of claims 1 to 6, wherein the insoluble azo pigment is a monoazo 25 pigment represented by the general formula (1):

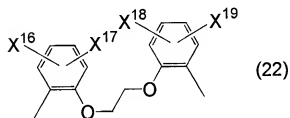
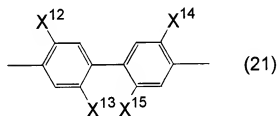


in the formula (1),  $X^1$  to  $X^3$  are the same or different and represent a nitro group, a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, an alkoxy group having 1 to 3 carbon atoms, an alkoxycarbonyl group having 1 to 2 carbon atoms, a group:  $-\text{CONHR}^6$ , or a group:  $-\text{SO}_2\text{NHPh}$ ,  $R^1$  to  $R^5$  are the same or different and represent a hydrogen atom, a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, an alkoxy group having 1 to 3 carbon atoms, an alkoxycarbonyl group having 1 to 2 carbon atoms, or a group:  $-\text{NHCOR}^7$ , provided that  $R^2$  and  $R^3$  may be combined with each other to form an ureylene group,  $R^6$  and  $R^7$  are the same or different and represent a hydrogen atom, an alkyl group having 1 to 3 carbon atoms, or a phenyl group, and Ph represents a phenyl group;

a disazo pigment represented by the general formula (2):



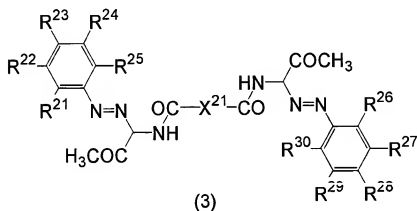
in the formula (2),  $X^{11}$  represents the general formula (21) or the general formula (22):



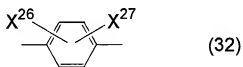
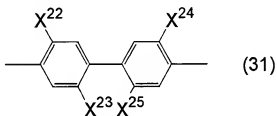
- 5 (in the formula (21),  $X^{12}$  to  $X^{15}$  are the same or different and represent a hydrogen atom, a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, or an alkoxy group having 1 to 3 carbon atoms and, in the formula (22),  $X^{16}$  to  $X^{19}$  are the same or different and represent a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, or an alkoxy group having 1 to 3 carbon atoms),  $R^{11}$  to  $R^{20}$  are the same or different and represent a hydrogen atom, a chlorine atom, an alkyl group having 1 to 3
- 10

carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, an alkoxy group having 1 to 3 carbon atoms, an alkoxycarbonyl group having 1 to 2 carbon atoms, or a group:  $-\text{NHCOR}^7$ , provided that  $\text{R}^{12}$  and  $\text{R}^{13}$  and/or  $\text{R}^{17}$  and  $\text{R}^{18}$  may be combined with each other to form an ureylene group, and  $\text{R}^7$  represents a hydrogen atom, an alkyl group having 1 to 3 carbon atoms, or a phenyl group;

a disazo pigment represented by the general formula (3):



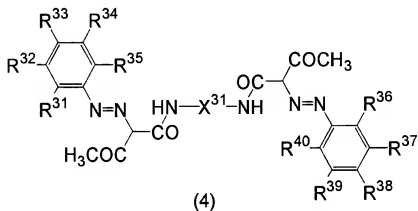
in the formula (3),  $\text{X}^{21}$  represents the general formula (31) or the general formula (32):



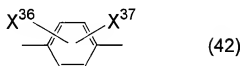
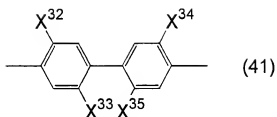
(in the formula (31),  $\text{X}^{22}$  to  $\text{X}^{25}$  are the same or different and represent a hydrogen atom, a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, or an alkoxy group having 1 to 3 carbon atoms and, in the formula

(32),  $X^{26}$  and  $X^{27}$  are the same or different and represent a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, or an alkoxy group having 1 to 3 carbon atoms),  $R^{21}$  to  $R^{30}$  are the same or different and represent  
 5 a hydrogen atom, a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, an alkoxy group having 1 to 3 carbon atoms, an alkoxycarbonyl group having 1 to 2 carbon atoms, or a group:  $-NHCOR^7$ , provided that  $R^{22}$  and  $R^{23}$  and/or  $R^{27}$  and  $R^{28}$  may be combined with each other to  
 10 form an ureylene group, and  $R^7$  represents a hydrogen atom, an alkyl group having 1 to 3 carbon atoms, or a phenyl group;

a disazo pigment represented by the general formula (4):



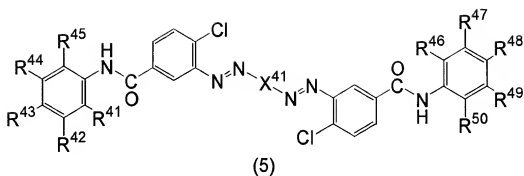
in the formula (4),  $X^{31}$  represents the general formula (41) or  
 15 the general formula (42):



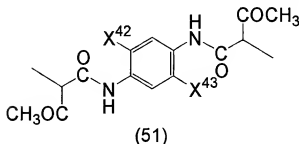
(in the formula (41),  $X^{32}$  to  $X^{35}$  are the same or different and represent a hydrogen atom, a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, or an alkoxy group having 1 to 3 carbon atoms and, in the formula (42),  $X^{36}$  and  $X^{37}$  are the same or different and represent a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, or an alkoxy group having 1 to 3 carbon atoms),  $R^{31}$  to  $R^{40}$  are the same or different and represent a hydrogen atom, a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, an alkoxy group having 1 to 3 carbon atoms, an alkoxy carbonyl group having 1 to 2 carbon atoms, or a group:  $-NHCOR^7$ , provided that  $R^{32}$  and  $R^{33}$  and/or  $R^{37}$  and  $R^{38}$  may be combined with each other to form an ureylene group, and  $R^7$  represents a hydrogen atom, an alkyl group having 1 to 3 carbon atoms or a phenyl group;

a disazo condensed pigment represented by the general formula

(5):

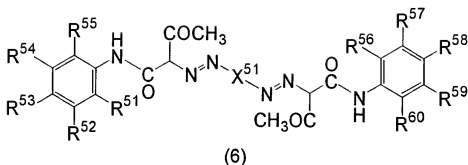


in the formula (5),  $X^{41}$  represents the general formula (51):

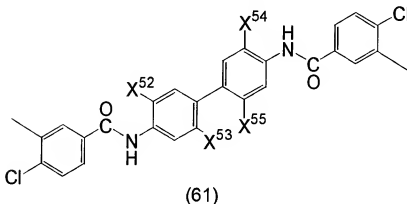


- (in the formula (51),  $X^{42}$  and  $X^{43}$  are the same or different and  
 5 represent a hydrogen atom, a chlorine atom, an alkyl group having  
 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon  
 atoms, or an alkoxy group having 1 to 3 carbon atoms),  $R^{41}$  to  $R^{50}$   
 are the same or different and represent a hydrogen atom, a chlorine  
 atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl  
 10 group having 1 to 3 carbon atoms, an alkoxy group having 1 to 3  
 carbon atoms, an alkoxy carbonyl group having 1 to 2 carbon atoms,  
 or a group:  $-NHCOR^7$ , provided that  $R^{42}$  and  $R^{43}$  and/or  $R^{47}$  and  $R^{48}$   
 may be combined with each other to form an ureylene group, and  
 $R^7$  is as defined above; or  
 15 a disazo condensed pigment represented by the general formula  
 (6):





in the formula (6),  $X^{51}$  represents the formula (61):



- (in the formula (61),  $X^{52}$  to  $X^{55}$  are the same or different and represent
- 5 a hydrogen atom, a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group having 1 to 3 carbon atoms, or an alkoxy group having 1 to 3 carbon atoms),  $R^{51}$  to  $R^{60}$  are the same or different and represent a hydrogen atom, a chlorine atom, an alkyl group having 1 to 3 carbon atoms, a perfluoroalkyl group
- 10 having 1 to 3 carbon atoms, an alkoxy group having 1 to 3 carbon atoms, an alkoxycarbonyl group having 1 to 2 carbon atoms, or a group:  $-NHCOR^7$ , provided that  $R^{52}$  and  $R^{53}$  and/or  $R^{57}$  and  $R^{58}$  may be combined with each other to form an ureylene group, and  $R^7$  is as defined above.
- 15 8. The electrophotosensitive material according to any one of claims 1 to 7, which is a single-layer type electrophotosensitive

material comprising a conductive substrate and a single photosensitive layer containing an electric charge generating material, an electric charge transferring material, an insoluble azopigment and a binder resin provided on the conductive substrate.